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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/273,468	03/22/1999	VLADIMIR VOLOKH	P-68422-US	7168
27130	7590	02/24/2006	EXAMINER	
EITAN, PEARL, LATZER & COHEN ZEDEK LLP 10 ROCKEFELLER PLAZA, SUITE 1001 NEW YORK, NY 10020			TSAI, HENRY	
			ART UNIT	PAPER NUMBER
			2181	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/273,468	VOLOKH, VLADIMIR	
	Examiner	Art Unit	
	Henry W.H. Tsai	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- | | |
|---|--|
| 15) <input type="checkbox"/> Notice of References Cited (PTO-892) | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 20) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 11-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Beck et al. (U.S. Patent No. 5,049,009) hereafter referred to as Beck et al.'009.

Referring to claim 11, Beck et al.'009 discloses as claimed a rotary multi-tooth milling cutter (10, see Fig. 1) with at least one tooth (14 and 15, see Fig. 1) including a lateral cutting edge (16, see Fig. 2) which rotates about a central cutter axis and cuts generally parallel thereto, the tooth further including a tooth face (30, comprising such as 31, 32, and 34, see Fig. 2) between the cutting edge and the central cutter axis, the tooth face comprising: at least first (the first convex section comprising 31 and a small portion of 32

having a top 33 of the convex section, see Fig. 3) and second (the main portion of 32, see Fig. 3, see Fig. 3) sections between the cutting edge and the central cutter axis, said first section (the first convex section comprising 31 and a portion of 32 having a top 33 of the convex section, see Fig. 3) being nearest to the cutting edge and being convex (with a sharp top 33, see Fig. 3), wherein said lateral cutting edge comprises a pointed cutting edge (16, see Fig. 3) oriented to cut in a cutting direction along a circular path (cutting path 18, see Fig. 3) centered at said central cutting axis, and wherein said cutting edge is oriented to define a non-zero relief angle (see Fig. 3, the relief angle formed between the relief wall 50 and the cutting path 18; see also col. 4, lines 8-19) opposite said cutting direction between said cutting tool and said cutting path.

Referring to claim 16 Beck et al.'009 discloses as claimed a rotary multi-tooth milling cutter (10, see Fig. 1) with at least one tooth (14 or 15, see Fig. 1) including a lateral cutting edge (16, see Fig. 2) which rotates about a central cutter axis (see Fig. 1), the lateral cutting edge extending along the length of the central cutter axis and cuts generally parallel to the central axis (see Fig. 3), the tooth face (30,

comprising such as 31, 32, and 34, see Fig. 2) comprising: at least first (the first convex section comprising 31 and a small portion of 32 having a top 33 of the convex section, see Fig. 3) and second (the main portion of 32, see Fig. 3, see Fig. 3) sections between the cutting edge and central cutter axis, said first section (the first convex section comprising 31 and a small portion of 32 having a top 33 of the convex section, see Fig. 3) being nearest to the cutting edge and being convex, wherein said lateral cutting edge comprises a pointed cutting edge (16, see Fig. 3) oriented to cut in a cutting direction along a circular path (cutting path 18, see Fig. 3) centered at said central cutting axis, and wherein said cutting edge is oriented to define a non-zero relief angle (see Fig. 3, the relief angle formed between the relief wall 50 and the cutting path 18; see also col. 4, lines 8-19) opposite said cutting direction between said cutting tool and said cutting path.

As to claims 12 and 17, Beck et al.'009 also discloses: the length of the first section (the first convex section comprising 31 and a portion of 32 having a top 33 of the convex section, see Fig. 3; see also col. 4, lines 3-7 in the situation when K-land 31 is only 10% of the overall length of the cutting surface

30) on the tooth face is 20% or less than the length of the tooth face between the cutting edge and central cutter axis.

As to claims 13 and 18, Beck et al.'009 also discloses: the first section blends tangentially into the second section (since the second section comprising the main portion of 32, see Fig. 3, see Fig. 3, the tangential point is within 32).

As to claims 14 and 19, Beck et al.'009 also discloses: the milling cutter as claimed in claim 11, further including a concave chip-breaking section (the concave section 32, see Fig. 2) located between the first (the first convex section comprising 31 and a small portion of 32 having a top 33 of the convex section, see Fig. 3) and second (note this is the section comprising the main portion of the tool surface 30 above point 34, see Fig. 2) sections of the tooth face.

As to claims 15 and 20, Beck et al.'009 also discloses: the first section (the first convex section comprising 31 and a small portion of 32 having a top 33 of the convex section, see Fig. 3) is smaller in length than the second section (see Fig. 2).

As to claims 21 and 22, Beck et al.'009 also discloses: said second section (the concave main portion of section 32, see Fig. 2) is concave.

Response to Arguments

3. Applicant's arguments mailed 12/12/05 have been considered but are moot in view of the new ground(s) of rejection. As set forth in the art rejections above, Beck et al.'009 anticipates the claimed invention.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Henry Tsai whose telephone number is (571) 272-4176. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Kim Huynh, can be reached on (571) 272-4147. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to **the TC central telephone number, 571-272-2100.**

6. In order to reduce pendency and avoid potential delays, Group 2100 is encouraging FAXing of responses to Office actions directly into **the Group at fax number: 571-273-8300.** This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your

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cover sheet. Papers submitted via FAX into Group 2100 will be promptly forward to the examiner.

A handwritten signature in black ink, appearing to read 'Henry Tsai', written in a cursive style.

HENRY W. H. TSAI
PRIMARY EXAMINER

February 18, 2006